

CHAMBERS' EDINBURGH JOURNAL

CONDUCTED BY WILLIAM AND ROBERT CHAMBERS, EDITORS OF 'CHAMBERS'S INFORMATION FOR THE PEOPLE,' 'CHAMBERS'S EDUCATIONAL COURSE,' &c.

No. 128. NEW SERIES.

SATURDAY, JUNE 13, 1846.

PRICE 1½d.

THE ROYAL EXCHANGE.

THE Royal Exchange, in general, has been more fortunate in finding historians than that portion of it which we recently described as 'Lloyd's Coffee-House;' still, the current descriptions are for the most part imperfect and incorrect, and utterly without the sanction of official authority.

Like everything in the city, the existence of the Royal Exchange is owing to individual enterprise. This is the spirit and essence of commercial prosperity. The merchant is generally the architect of his own fortune; his pursuits necessarily bring him into contact with his fellow-men; and thus, while the principle of association obtains with him, and expresses itself in the guild and the corporation, in his own person he maintains a special individuality. To him who would indulge personalities, and portray characteristics, a visit to the city would afford many examples—some strange and odd enough, but all striking, and strongly-marked. In other pursuits of life there is more or less of a professional costume, which sinks the man in the official; but the merchant pleases himself, or acts upon early associations, in his dress and conduct. His success mostly depends, indeed, upon the personal. The great Rothschild is said to have had his 'secret,' which even his lady sought in vain to penetrate, and which was the basis of his success. Sir Thomas Gresham, the founder of the Royal Exchange, is an illustrious example of the truth of these remarks. Edward VI. consulted him frequently on the best manner of proceeding to rid himself of debt; and Sir Thomas devised 'a secret scheme' for this purpose, the evolution of which required two years' trial. It perfectly succeeded. His plan was, to take up in Antwerp two or three hundred pounds sterling in his own name by exchange, out of money to be privately furnished by his majesty—a process of liquidation so gradual as not likely to be perceived, or to occasion any fall in the rate of exchange. As the king's debts did not exceed £108,000, with interest, the time claimed was amply sufficient for the purpose. The result was, 'to raise the exchange from sixteen shillings Flemish for the pound sterling to twenty-two shillings; at which rate,' says his biographer, 'Gresham discharged all the king's debts; and by this means money was rendered plentiful, and trade prosperous, while the credit of the crown became established on a firmer basis abroad than it had ever been before.'

It was during his residence at Antwerp that Gresham conceived the idea of a Royal Exchange for London—the former city having already provided itself with such an accommodation in 'the Bourse,' a building of noble dimensions. It was one part of Gresham's character that he was a thorough Englishman, and had the interest and honour of his country always at heart. He

showed this by his advice to Queen Elizabeth when in need of a loan: 'Not to use any strangers, but her own subjects, that it might be seen what a prince of power she was.' He was indeed anxious, in all cases, that the merchants of London should benefit by the discounts and interest accruing on such transactions; and took care that the counsel he had given should not fail for want of his own exertions. Having conceived an idea, he had faith in it, and thus accomplished it.

Intelligent, successful, liberal, munificent—such are the attributes which necessarily belong to the merchant-prince—such qualities rendered Sir Thomas Gresham illustrious. Of these, therefore, he must have been an eminent example—a marvel, among useful and honourable men, of honour and utility. If not less ambitious than his contemporaries, he was, in fact, more generous. This habit of mind was sometimes even ostentatiously exhibited. When Queen Elizabeth, in 1576, visited him at his residence in Osterley Park, he not only entertained her with extraordinary festivity, but on her objecting that the courtyard was too large, and would look more handsome if divided in the middle, he sent forthwith for workmen from London, who laboured in the night silently; and by the time her majesty rose in the morning, a wall was erected, producing the appearance she had desired.

A mind so constituted was not likely to permit London to want what Antwerp enjoyed longer than necessity obliged. He yielded to delay with reluctance. Our readers are already aware that, previously to the erection of the Royal Exchange, the merchants of London had been accustomed to assemble in Lombard Street, which took its name from the rich and extortionate Lombard merchants who, anterior to the year 1274, came from the four Italian republics of Genoa, Lucca, Florence, and Venice, and settling in England, wrang from the necessities of Edward I. those exclusive privileges which enabled them to oppress the English trader and insult the English king. Edward III. to put a stop to their career, seized on their estates; but they survived the misfortune to lend money to Henry VI. and to receive, as security for the sum advanced, a mortgage on the English custom duties. They continued in Lombard Street till the reign of Queen Elizabeth, when it was reserved for Sir Thomas Gresham to confound their projects, and oblige them to quit the country. They are still remembered by their armorial bearings—the three golden balls, which pawnbrokers use as the ensign of their shops. The want of a Bourse is said to have been felt also by the father and uncles of Gresham; and the desire to form one to have 'run in the family blood.' At length, in 1563, Sir Thomas announced his intention to erect one at his own expense. On the 4th January 1564 the offer was accepted by the Court of Aldermen, who forthwith engaged themselves

to supply a spot of ground for the purpose, and appointed a committee of aldermen and common councilmen to select a site. The Company of Merchant Adventurers were called on to contribute 400 marks towards the expense; and the several city companies advanced different sums by way of loan; care being taken to secure the benefit of the erection to the city in perpetuity. In fact, there is in the corporation books a special entry of a carouse held at the house of Mr John Ryvers, alderman, in which Sir Thomas, in the presence of witnesses, undertook, in case he should die childless, to bequeath the whole of the profits, in equal moieties, to the city and the Mercers' Company.

Certain houses formerly standing in Cornhill, and the alleys and lanes branching from it, having been removed, at the cost to the city of £3737, 0s. 6d., Sir Thomas Gresham laid the first stone on the 7th June 1565, accompanied by a few aldermen, who, we are told by Stowe, 'every one of them laid a piece of gold, which the workmen took up.' By November in the following year, the building was completely covered in, and in a condition to receive the merchants. It was, however, not at first patronised as might have been expected; nor was it until two years after its completion that it received royal countenance. The queen then came into the city, and honoured the founder with her company at dinner. It was upon this occasion that it received the name of the 'Royal Exchange.' The architect employed by Gresham was a Fleming named Henryk, who seems to have designed it after the Bourse of Venice, from which that of Antwerp was copied. Prints of it, as it then stood, still exist, dated 1569, with an inscription in French, Dutch, and Latin, in honour of the founder, whose crest—the grasshopper—surmounted the tower, and ornamented the corners of the building.

The royal visit was highly beneficial. Sir Thomas Gresham had remitted the rent for the year to the tenants of the shops that formed part of the building—a plan attended with so much success, that he was soon afterwards enabled to raise their rents considerably; for, owing to the show they made on the occasion of the queen's visit, the nobility commenced a custom of sending thither for the most costly articles, and thus the shopkeepers rapidly became rich. But for all this, in the first instance, the one man was wanting not only to commence the undertaking, but to induce his fellow-men, by rewards and promises, to promote by reasonable means their own interests. Thus it is that all great movements are really made; not by the large bodies who follow, but by the few individuals who lead. The mass of men, it would seem, are without providence, and need some Prometheus to volunteer for them, that they may reap the profit of enterprise without incurring the risk.

The history of the Royal Exchange, from this period to its destruction by the fire of London in 1666, is that of the country. The troubles of the great Rebellion, the character of the Commonwealth, and the nature of the Restoration, had each its type in connexion with this building. A statue of Charles I., which had been placed there, was removed on the 30th May 1648, and substituted with an inscription—*Exit tyrannorum ultimus*; which was in turn removed, and replaced with a new statue, after the return of Charles II. Here also, on May 28, 1661, the acts for establishing the Commonwealth were burned by the hands of the common hangman. The state of the Royal Exchange during the plague is told by Pepsys and Lord Clarendon:—'By day, the streets presented a most frightful aspect of desolation and misery; and at night, the dead-carts, moving with slow pace by torchlight, and with the appalling cry, "Bring out your dead!" thrilled horror through every heart that was not, by suffering, hardened to calamity. The stoppage of public business was so complete, that grass grew within the area of the Royal Exchange!'

The statesmen of the famous period in which Gresham lived, and with whom he had intimate intercourse,

were as eminent for their learning as for their political genius. The merchant was equally anxious to exhibit his love of letters as to advance the interests of commerce, and this the author of the Exchange showed by founding the college which is called after his name. He also provided that, after his death, the city should, out of their moiety of the property in the Royal Exchange, pay annual salaries of £50 each to professors of divinity, astronomy, geometry, and music, who should deliver lectures at the founder's late residence. After the conflagration of the Royal Exchange, 'Gresham College' was, in the first instance, resorted to for commercial purposes; arrangements were there made for the accommodation of the merchants, until a new Bourse could be erected.

The example having been once set, and the convenience of an Exchange having become apparent, the erection of the new Exchange needed not the special stimulus of an individual will, but was an object of desire to the general mind. A commercial city destitute of an Exchange was now thought, to adopt the language of Mr Malcolm in his *Londinium Redivivum*, 'as improper a residence for merchants as a parish without a church for that of religious people.' The first stone of the new building was laid on the 6th of May 1667. Sir Christopher Wren was the architect: the expense was shared between the Corporation and the Mercers' Company, and amounted to £80,000. The royal consent was not obtained till afterwards, when Charles II. laid the base of the column on the west side of the north entrance on the 22d of October, on which occasion his majesty was feasted. The Duke of York and Prince Rupert laid the bases of other columns a few days subsequently, and were likewise civically regaled. The structure was completed on the 28th September 1669, and opened by the lord mayor, Sir William Turner, the king having been prevented from attending.

Owing to the fire of 1833, the Royal Exchange thus erected by Sir Christopher Wren is now only matter of history. The architecture, as most of us recollect, was beautiful—the four orders of the quadrangle being indeed magnificent, and richly decorated with the basements, arches of the walks, the cornices over them, the niches, statues, pillars, circular windows, entablature, pediments, and balustrade, all in correct proportion and arrangement. Its principal front was towards Cornhill; and on each side there were Corinthian demi-columns, supporting a compass pediment; within each of which were niches, containing statues of Charles I. and II. in Roman habits, by Bushnell. Within the quadrangle there were twenty-four niches in the intercolumns, with statues of English kings and queens—most of the kings before Charles II. being sculptured by Cibber. The centre of the area had for some time a statue of Charles II. by Grinlin Gibbons, which was subsequently displaced for one by Spileer, habited in the Roman style. In an obscure position under the piazza the statue of Gresham, too, had its niche; and high to it, that of one whose modesty would have been better content had his merit received no such acknowledgment—Sir John Bernard; to whom, in his lifetime, the memorial was erected as a mark of civic respect, but who could never bring himself to visit the walks afterwards.

We regret that the history of Gresham College is less satisfactory than that of the Royal Exchange. The civil wars and the fire of London having pressed hard on their funds, the city of London endeavoured to get rid of the cost of the lectures, which, though at first considered of great importance, gradually declined in interest. In 1768, an act of parliament was even obtained 'to make over the ground whereon Gresham College stood to the crown'; and a proposition was made by the city and the Mercers' Company to pull the college itself down, and build an excise office on the site; which was done. From the moment, indeed, that the founder conceived the generous idea of converting his own house into a college, there was a jealousy expressed. Sir Thomas

Gresham, it would appear from an address to him from the vice-chancellor and senate of the university of Cambridge, had made some promise of contributing towards building a new, or repairing an existing college. This design he seems to have subsequently enlarged. The enlarged design was approved of, but the site was objected to. The university authorities endeavoured to dissuade him from selecting London, lest it might prove prejudicial to Oxford and Cambridge. He himself had been educated at Cambridge, and this was urged as a reason why Cambridge should have a preference. We have seen that he persisted in his good intention of giving the city of London a college. We regret that the boon has been so ill received; and that, up to the present moment, it has been altogether abused, the lecture-ships being little better than sinecures.

We now come to the consideration of the subject in relation to the times in which we live. On the night of the 10th January 1833, the structure of Sir Christopher Wren was burned to the ground. On the particulars of this calamity we need not dwell; they are doubtless fresh in our readers' recollection. The merchants of London for a time made the Guildhall their place of meeting, and afterwards the area of the Excise Office—the site of Gresham House and Gresham College; thus, as far as circumstances allowed, re-enacting the scene of former times. In preparing to re-erect the Royal Exchange, many interests had now to be considered—those of the underwriters at Lloyd's, the Royal Exchange Assurance Company, and the shopkeepers who had occupied the ground-floor. An act of parliament was also necessary, which received the royal assent on the 10th August 1838, and empowered the Gresham Committee to purchase and remove all the buildings to the eastward, extending nearly to Finch Lane, and to raise £150,000 upon the credit of the London Bridge Fund. Premiums were at length advertised for the three best designs. More than fifty competitors appeared. Three architects—Sir Robert Smirke, Mr Gwilt, and Mr Hardwick—were chosen to report on their productions; and these gentlemen considered that the designs numbered 36, 43, and 87, best answered the conditions prescribed; but declined to recommend them for adoption. To the artists—Mr William Gredley, Mr Sydney Smith, and Messrs Chateaufort and Mee—the premiums were nevertheless paid. Ultimately, a limited competition between five architects—Sir Robert Smirke, Mr Gwilt, Mr Tite, Mr Barry, and Mr Cockerell—was proposed, but only Mr Tite and Mr Cockerell entered the arena. The preference was at length given to Mr Tite; and on Monday the 17th January 1842, the foundation stone was laid by Prince Albert, with much state and ceremony, full descriptions of which appeared in the newspapers of the day. Within three years from that date the new Royal Exchange was completed—a very brief space of time for such a work, especially considering that it consists entirely of stone.

The structure does credit to the artist, and to a great extent realises the character of grandeur, simplicity, and usefulness which he desired to give to it. The west front is of course the principal feature. Here a portico is placed, superior in dimensions to any in England, and almost equal to any in the world. It consists of eight Corinthian columns, with two intercolumniations in actual projection, and the centre part also deeply recessed. The width is ninety feet, and the height from the ground to the apex of the pediment is seventy-four feet six inches. From the level of the street it is ascended by thirteen granite steps. Here, on the right and left of the entrance, are the offices of the Royal Exchange Assurance for Assuring Shipping, Fire, and Lives. Next in dignity is the east front. In the projection of his plan, the artist had to conquer a difficulty relative to the situation of the tower, arising from the shape of the ground, because, to quote his own words, 'Any tower placed to agree with the lines of the south front must disagree with the lines of the east and west fronts, which are in different planes; and such an ob-

ject, when seen from a distance, or from the area of the Exchange, would produce an effect that would be discordant and unarchitectural; because it would bring into distinct notice a fact which it should be the business of the architect to conceal. For a long time,' he continues, 'I contended with this difficulty, because I was anxious to place the tower or towers in the south front; but it was impossible to get over the irregularity. It would indeed have been easy to have concealed this defect in the drawings, or have kept it out of notice; but the result, when built, would only have ended, in my judgment, in disappointment and failure. For these reasons, and with these views, I have composed my design as it is now exhibited. I have placed a portico at the west end, and the tower at the east.*' The first story of the tower, at the east front, is square, with ornamental pilasters; at the angles there is a niche, with a statue of Sir Thomas Gresham by Behne. The figure is erect, fourteen feet six inches in height, and chiselled out of two blocks of Portland stone. Above is an attic for the clock faces. The next storey is circular, decorated with Corinthian columns, and crowned with a leaved dome, surmounted by the vase—the famous grasshopper of the old Exchange, which, fortunately, the fire had not much damaged.

Under the tower, at the eastern entrance, there is a small area for giving light and air to the inner mass of that part of the building. At the north end of this area, as we have already said, is the entrance to Lloyd's. At the centre of the building, on the north and south, there are also entrances to the Merchants' Area. Both these fronts exhibit unbroken lines of entablature, with a repetition of rusticated arches for the shops, offices, and entrances. The architect made a point of this peculiar style. He had in his mind 'the universally-acknowledged good effect of the Bourse at Paris,' in which 'the lines are simple and unbroken, and the large arched windows surrounding the walls behind the columns have all the character of shops or offices.' 'We are deficient,' he adds, 'in England, of specimens of architecture of that unbroken kind. Were I to adduce instances, I should quote the National Gallery as affording an illustration of the bad effect of broken and detached masses, and the Reform Club of the excellent effect of continuous and unbroken ones.' The three middle spaces on the south side are deeply recessed, surmounted with richly-decorated windows; above the cornice are a balustrade and attic; on the north side the centre projects; and at the end spaces the pilasters are omitted; for two of the windows, niches are substituted—one of them to contain a statue of Sir Hugh Myddleton, by Joseph; and the other a statue of Sir Richard Whittington, by Carew.

Such is the architectural character of the building: among its accidental adjuncts are a peal, in the tower, of fifteen bells for three chiming, cast by Mears, and a clock constructed by Mr Dent, under the direction of Professor Airy, the astronomer-royal, the first stroke of each hour being true to a second of time.

Provision has been made in the new building against fire. The ground-floor, as in the old, is still appropriated mainly to shops and offices; but each is complete in itself, separated by party-walls and brick arches, as well from the apartments above as the tenements beside them; so that any accidental fire must be local.

* Mr Tite's Letter to the Grand Gresham Committee, dated 27th April 1840.

† As whatever relates to Sir Thomas Gresham is interesting, we may record here the circumstances that a portrait, painted on panel, life size, of the royal merchant lately came, by bequest, into possession of the City Lecture Hall. The work is held to be a fine specimen of the arts of its period, and represents Sir Thomas at the age of twenty-six. He is attired in a plain black doublet, hose and gown, with a flat cap upon his head, and a small lace collar—all indicative of the unpretending British trader. In one corner of the picture are the letters 'A. G.', tied together by a knot, beneath which are the words, 'Love, serve, and obey'; and under that 'T. G.', also tied by a knot; and upon the frame, which is of black wood, and of the same age as the picture, is the motto, 'Dominus Mihi Adjutor, T. G.', repeated on each side.

We must not, however, conclude this paper without reference to the sculpture with which the new Royal Exchange has been adorned. That by Mr Richard Westmacott, in the tympanum of the pediment at the west front, deserves earliest and highest mention, both from its position and its merit. Allegorical in subject, it nevertheless avoids the objections to which such compositions are generally liable. It consists of seventeen figures, carved in compact limestone, and, with two exceptions, modelled as entire and detached figures. The centre figure, which is ten feet high, represents Commerce—with her mural crown, her cornucopia, beehive, and other accessories. Her left hand holds the charter of the Exchange, her right rests on part of a ship—two dolphins and a shell forming her pedestal. The groups on either side consist, on the right, of three British merchants in their civic robes—as lord mayor, alderman, and common councilman; two Asiatics, a Hindoo, and a Mohammedan, in appropriate costume; a Greek bearing a jar; an Armenian scholar, and a Turkish merchant; and, on the left, of two British merchants examining some woven fabric shown to them by a Persian; a Chinese; a sailor of the Levant; a negro; a British sailor cording a bale of cotton; and a supercargo, or factory agent. The opposite angles are filled with anchors, jars, packages, and other nautical and commercial emblems.

The internal area of the Royal Exchange is uncovered, presenting an open court, somewhat resembling the cortili of the Italian palaces; consisting, on the ground-floor, of Doric columns and rusticated arches, over which is a series of Ionic columns, with arches and windows under a pierced parapet. The upper storey also has arches: these are decorated with the arms of various nations, according to the order determined at the congress of Vienna—the arms of England occupying the centre of the eastern side. There is also a sheltered walk for merchants, with the ceiling and sides panelled, painted, and emblazoned with the arms of countries and monarchs; namely, Edward the Confessor, Edward III., Elizabeth, and Charles II. The south-east angle also boasts a statue of Queen Elizabeth, and the south-west a statue of Charles II.

It only remains now to speak of the statues of Queen Victoria inside the building, and of the Duke of Wellington without. The latter is a bronze equestrian figure, by Chantrey, and was composed of the metal of the guns taken from the enemy, contributed by the government, and valued at £1500. The cost of the statue itself was £9000. It was completed on the anniversary of Waterloo, the 18th June 1844, when the inauguration took place, at which the king of Saxony attended. On the 28th October following, the new Royal Exchange itself was opened by the Queen in person with great state and ceremony. It was not until the 27th of October in the next year that her Majesty's own statue was placed on its pedestal in the centre of the area. Of this work a friend thus writes:—“There is here no anachronism—no pedantry. It is the statue of Queen Victoria—her image as she lived—in the robes she wore, rendered poetic by the inspiration, and picturesque by the genius, of art; free from theatrical exaggeration; equally balanced, chaste, and pure, as well as noble. Such a portrait statue, produced for a Leo X., or a De Medici, or presented to the population of a mediæval city in Italy, would have given a triumph to the artist. Mr Lough deserved an ovation at the hands of the citizens. What will be thought in time to come of the age in which we live, when royal patronage, state commissioners, and the public money not only conspire to call out a *quasi* power of art from the depths of oblivion, but also conspire, meanwhile, to neglect a genius capable of giving honour and illustration to any age or nation?”

These remarks are somewhat enthusiastically expressed; but the inconsistency to which they point certainly provokes animadversion. The mercantile element clearly too much predominates, and the artistic is re-

duced to a mere accessory. The same remarks apply to literature, and the mode in which the Gresham lectureships are now managed. No amount of censure can be too heavy in condemnation of the present glaring neglect and misconduct. The site of the institution has been changed. The new Gresham College stands at the corner of Basinghall Street and Cateaton Street. It is of the enriched Roman style of architecture. There are a library, a lecture-theatre, and a professor's room; but the end for which these means have been prepared has yet to be secured. What would Sir Thomas Gresham himself have said to this? For the honour of the founder, and from respect to his memory, we call upon the authorities of the college to lose no time in making all needful and possible reforms. We know intimately well that there are many men of literary tastes among the merchants of London. Let them be consulted, and immediate measures taken for the prosperity of an institution not less glorious in its object than the Exchange itself. Literature and commerce are twin powers, and should never be divorced in operation: united, the progress of society proceeds safely, blending use with beauty; separated, wealth may be accumulated; but without intelligence to direct its aims, it is a mockery and a snare—a burden and a yoke. And such will be, must be, the reflections of every one capable of at all entering into the spirit of Sir Thomas Gresham.

A DAY IN THE HIGHLANDS OF CORSICA.

It is now nearly twelve years since an accident to the small trading vessel in which I had embarked for a passage from Palermo to Marseilles obliged us to bear up for Bastia, it being the only port then under our lee where we could get the damage repaired. This gave me an unlooked-for opportunity of visiting the birth-place of Napoleon. At that time steam-navigation in the Mediterranean was in its infancy (it is only on the great lines that it is good for anything yet), and the island of Corsica, lying out of the direct track of merchant ships, and having, besides, a bad general character for unhealthiness, was seldom or never visited. My own stay was necessarily so short, that I could see little, but the adventures of only one day have made much impression on my memory.

It was already dusk, when, from pitching and rolling upon the open sea, we suddenly slid into the quiet of the harbour; and there was barely light enough to show us the outline of ‘Le Lion,’ the singular rock, so called from its likeness to a couchant lion, which, with head and paws outstretched, lies, as it were, on guard before the entrance. The peacefulness of the evening was perfect. The broad dark sheet of the harbour lay at rest beneath the weakening light, growing blacker and blacker every minute, as the shadows of the overhanging heights steadily lengthened over its surface, till by degrees, as the actual outlines of the buildings on shore faded from the view, the glimmer of their lights in turn began to flicker along the margin of the basin. The land-breeze came sighing down upon us over the water, laden with the perfume of the orange-trees, and brought with it the hum of many voices from the promenade, on which the whole population had turned out to enjoy the refreshing coolness. When we landed, the night was, as I have said, too dark to distinguish anything; but in the morning we walked about the town, which is quite Italian in character; and the people, too, are Italian, or nearly so, with a perceptible dash, however, of the French in many of their customs, particularly among the ladies, who appear in the evening quite in Parisian costume. I naturally looked on every side for some monument of Napoleon; but, to my surprise, there was nothing of the kind. The emperor, it is well known, showed no favour to his native country—probably because his Corsican origin could not be expected to raise him in the

eyes of the French—and he is naturally no favourite in his birthplace. Our own hero, Nelson, on the other hand, was often mentioned, though this might have been in compliment to me as an Englishman. The remains of the works from which he cannonaded the place are still visible on a steep eminence overlooking the harbour.

The streets generally are high and narrow, as in most towns of Italian construction, and reasonably neat; and that is all. But the situation is very fine. Immediately behind the town the ground slopes gently upwards, forming the foreground to a bold line of precipitous heights, clothed along their flanks with vineyards and olive-grounds, and crested by groves of the ever-green oak; while above and beyond these, in the distance, the chain of the Monte Stello stands out clear and distinct against the splendid southern sky, with one bold serrated peak towering in the midst, like the central keep of the district. From a common effect of so transparent an atmosphere in these latitudes, the mountains, though in reality many miles off, seem to look into the town, forming, as it were, a Vandyked and irregular border to the blue mirror of the Mediterranean, which on every other side, save where it is dotted with a group of far distant islets, blends imperceptibly with the horizon.

It was impossible to see the magnificent mountain tops so provokingly near, without a strong desire to look at them more closely. For this, however, a guide was indispensable; and I found it no easy matter to get one. The Corsicans, like most southern people, seem to care very little for their scenery; and although almost at their doors, the mountains are as little known and traversed by them as the Grampians were by our grandfathers a hundred years ago. Like them, they have to plead in excuse that mountain travelling is neither very easy nor very safe. The only persons who are acquainted with these wilds are the banditti, who find them a capital stronghold from which to carry on their trade, either alone, or in conjunction with that of shepherds, goatherds, or smugglers, as the case may be. The guide whom at last I succeeded in finding was a very robber-like person, with a worn, suspicious face, bronzed almost to blackness by the sun, a magnificent spread of the chest and shoulders, and, to judge from the cordage of sinews about the calf of the leg, which the opening of his leathern gaiters showed in all their protuberance, no less gifted by nature with what is as necessary to a depredator as strength and hardihood—the power of running away. He made no secret himself of having been a smuggler; but whether he confined himself to levying contributions on the king's revenue, or varied it by raising them direct on the king's subjects, the gens-d'armes must have rejoiced at the cause, whatever it was, which led to his turning an honest man. Probably he might think open robbery too precarious—pleasant, but impolitic.

With this potent auxiliary—who turned out, as far as I was concerned, a very honest fellow—I started at sunrise, on a roasting July day, to visit the cavern 'Dei Quattro Banditti' (a congenial name), situated high up in the flanks of the aforesaid Monte Stello. I had always hitherto been disappointed in caverns; but this was situated in the heart of the scenery I wished to visit, and the story connected with it gave it interest. As the day's journey promised, at all events, to be very fatiguing, and part of the way at least was reported practicable for horses, a couple were hired, and a peasant engaged to bring them back. Though it was barely five o'clock A.M., by the time we had got out of the town it was oppressively warm; but we did not feel the sun at first, as our path led directly in among the vineyards; and for the next half hour we were trotting briskly forward under the overarching boughs, in a kind of half twilight, with an occasional bar of golden sunshine streaming on us from between the stems. Nothing can be conceived more delicious in such a climate than these bowers of coolness, with their long prospective avenues of leaves, and the perfect

quiet, only broken by the hum of wasps and dragon-flies, or the twitter of a bird as it hangs pecking at the rich clusters of fruit overhead. From these we emerged suddenly into the full blaze of the sunshine, upon an arid table-land, bare of all vegetation save a few stunted juniper-bushes, and cut up by ravines and brooks, one of which, flowing direct from the Monte Stello, was to serve us as a guide. At the end of this plateau we had to dismount, and leave our horses with the peasant; the rest of our journey being a mere scramble, often on hands and knees, in many parts over ground of the most treacherous description, where the rains had washed away every trace of a path, leaving in its stead nothing but gravel and rolled stones, which slid from beneath our feet, and fell in showers into the muddy torrent below at a depth most unpleasant to contemplate. Two hours of this work took us at last into a kind of amphitheatre of black granite rocks, at the base of which we stood among a chaos of fragments, some of which, matted with moss, or in parts overgrown with bushes and brambles, seemed to have lain there ever since the creation; while others, from their fresh and splintered angles, had evidently rolled over from above at no remote date. Directly in front, the Fiumetta (so called) streamed in one clear pitch of two hundred feet at least, sending up a volume of spray, which the wind showered over us, and beyond. It was close to this fall that we were to look for the cavern. At this distance of time I have no clear recollection of the exact position in which it was placed with respect to the surrounding rocks, or of the path by which I attained it; but I recollect very vividly the uncomfortable sensations with which, on my foot slipping in one perilous stride, I found myself suspended between heaven and earth by the bough of a wild olive-tree growing in the face of the precipice. This I clutched just in time to save myself, and with infinite joy swung my body, safe and sound, past all danger of slipping, upon a ledge of rock not more than three feet in breadth, facing an oven-shaped hole, which was the portal of the cavern that had given me so much trouble to visit.

The cavern of the four banditti is so called from its having been the stronghold of four famous outlaws, who were enabled by it to escape destruction from the Genoese in a manner sufficiently remarkable. As we rested on the rock, before entering the cave, it was impossible not to admire the fitness of the place for the story connected with it. From here, we could look for miles over the valley of the Fiumetta, and the dim lines of the plain which we had traversed in the morning. Bastia itself lay out of sight under the shoulder of the hills; but the sails of the various vessels approaching or leaving its port were distinctly visible, like specks on the horizon. The entrance of the cavern was so narrow as to be invisible from below; but after creeping some yards through a kind of passage, like a fox earth, which reminded me painfully of the description in Guy Mannering of a similar place, it rose into a large open vault, as high as that of a cathedral, and running back a great way into the rock at the same height. A dusky light streamed from above through some crevice in the rock, and served to give us a vague idea of its extent, without showing any visible termination. Where it fell strongest, the fragments of an earthenware pot and some scattered bones were lying; and in one part the side was still blackened with the smoke of the fire which had been reared against it. At the sight of these relics, the guide, who had till then fully maintained the lazy indifference of a son of the south, became amazingly energetic, and alternately vented curses against the Genoese, and ejaculations for the souls of the departed. As we rode back in the evening, I got him to give me the whole story, which he did with great gusto, evidently taking in it a professional interest.

The year 1729 is celebrated in the history of Corsica for the commencement of that series of intestine struggles which, after calling forth the energies of many remarkable men, of whom Paoli was the chief,

ended in substituting the French for the Genoese as its masters. The feeling among the islanders was generally in favour of the rising; but it was not without alloy. The Genoese had held the island for centuries; many avowed connexions had been formed with the natives; and many hearts which had beaten with mutual, though unavowed affection, were now to be separated for ever. Among other connexions of the kind, a girl named Cornelia Cartucci was at this time betrothed to Marcangelo Santi, a Genoese of noble family. Before the marriage could take place, the insurrection broke out, and Santi, under pretence of obedience to orders from his superiors, refused to complete the contract.

An insult of this kind is one which a Corsican never forgets or forgives. The four brothers of Cornelia vowed vengeance, and kept their vow. As a preliminary step, characteristic of the country now as then, they took to the mountains as banditti, and from thence despatched a letter to Santi, requiring of him, categorically, to fulfil his promise within one month from the date thereof; and if he should fail in so doing, declaring their deliberate intention to put him to death. The letter met with no attention; and within one week from the fatal limit, Francesco, the eldest brother, fulfilled the threat by pistolling Santi with his own hand in the high street of Bastia.

By this time the first burst of the revolt had been put down for the moment, and the Genoese, as is always the case with a weak government when it has been heartily frightened, prepared to punish all engaged in it to the uttermost. The assassination of Santi, though arising out of private pique, was still an outrage on one of the dominant party, and had originated in national differences. The commandant at Bastia set a price of one thousand crowns on the heads of the guilty parties, and promised an equal sum, and a free pardon, no matter for what crime, to any bandit who should succeed in bringing them to justice. The brothers, upon this, consulted with their partisans among the villagers, who, looking on them as sufferers in the national cause, were to a man zealous in their behalf. The pursuit threatened to be so very keen, that it was impossible to hope to lie hidden in the villages. Some time before, an ibex hunter had lighted upon this cavern: it was known, as they thought, only to themselves. The approach was by one path, and that exceedingly difficult; and even if they should be discovered, no amount of force, nothing but starvation, could dislodge them. Hither, then, the brothers retreated, with arms, ammunition, and a stock of food and water for a week, which it was agreed one or other of their friends should replenish every four days.

For nearly three weeks it seemed as if the bandits had vanished into air. The government, upon this, raised the reward to two thousand crowns—an immense sum for the time and country; and at length it had its effect. Four bandits, called the robbers of Ficaja, volunteered upon the conditions proclaimed, and were accepted. They had not been long upon their quest, before they noticed the regular departure of one or other of the peasants with a much larger supply of food and water than could be wanted for one day's field-work. The next emissary was followed, and tracked to the hollow among the cliffs; but there the clue stopped. Along the wide face of the precipices no smoke or sign of life was to be seen, and the absolute silence was only broken by the croaking of the ravens, which had their nests among the crags. Convinced, however, that their object could not be far off, three of the men remained to watch, while the fourth was despatched to communicate the news of their discovery at Bastia.

At this news the Genoese were in ecstasies of joy proportional to their previous disappointment. A company of voltigeurs were immediately despatched; the church bells rang out in the villages; and, as the peasantry had no alternative but to obey, in less than three

hours five hundred armed men were assembled. The whole force was immediately marched up the mountains, and so stationed as to cut off all access from without. Every approach to the stream was especially guarded; and as no water could be got among the granite rocks, it was confidently expected that thirst alone would force the bandits into a surrender.

The situation of the besieged was horrible. The magnitude and disposition of the force took away all hopes of escape. Five days had passed since they had received their usual supplies, and there was only a piece of bread remaining, and no water. Death, however, was equally certain whether they surrendered or not. Their position was impregnable; and they took a common oath to hold out to the last, and prepared to endure the silent progress of hunger and thirst with that tenacity of passive suffering characteristic of a southern people. The small piece of bread—about eight ounces—which remained was divided into four equal parts, and served them for a meal the first day. A second, a third, and a fourth day were passed in quiet endurance. By the end of the fourth they had devoured their shoes, belts, and everything which could prolong life. But their hunger was nothing to the raging of their thirst. Not a drop of rain had fallen: the sky remained a cloudless blue; and, as the climax to their suffering, they could hear, almost underneath their feet, the rushing of the stream, without a possibility of reaching it. They had not been without hopes of deliverance by assistance from without; but though the peasantry carried their sympathy so far as to offer up prayers for them in the churches, their spirits were too much broken to offer actual resistance to the authorities.

On the fourth evening, Pasquale, the youngest, proposed to surrender, since nothing could be equal to what they actually suffered. But Francesco refused. 'I am very sure,' he said, 'that I shall die myself, as my hand has brought this on us; but you may still escape; and if not, better we die as we have lived together, than give a triumph to our enemies.'

It seemed as if his words were prophetic. The next morning a gray mist was on the sky, heavy clouds were sweeping along the lower range of the hills, and the lightning was very frequent, broad, and deeply-tinged with blue. At length, in the afternoon, the storm burst upon the encampment, which lay completely exposed to its fury. The Fiumetta, which, from the protracted drought, had scarcely run on the preceding day, came down in a wall of water, which soon boiled up over its narrow sides, and cut off the Corsicans on the hither side from the Genoese beyond. The tents were blown down; the rain had put out the watch-fires; and as the night came on without a star in the heavens, each group remained crouched together at its post, dreading to stir in the absolute darkness. To the brothers the storm and the darkness seemed a direct interposition of Providence in their favour, which nerved them to make a desperate effort to escape. The descent to the base of the precipice was one hundred and sixty feet in depth, and nearly perpendicular. By cutting into strips all that remained of their garments, and tying them together, a line was formed, which barely reached half-way down, and the chance was slight of finding the proper footing during the remaining half. The same darkness, however, which made it perilous to them, veiled them from their enemies; and if the rock had fallen, it would not have been heard amid the roaring of the torrent and the storm combined. They made the attempt, and Pasquale and Dominico reached the bottom in safety. Francesco was last, and had achieved two-thirds of the descent, when Salvator, the third, who was immediately beneath him, feeling his own footing give way, threw up his arms, and caught with the strength of despair at the stone on which Francesco was standing; it loosened beneath the double strain, and a sudden rush through the air told the brothers their fate.

'And did the others escape after all?' I asked, as

simultaneously with the end of his story we paced into Bastia.

'They escaped, excellenza, to Napoli, where Pasquale died. Dominico was my mother's uncle, excellenza—a famous bandit! Such an eye, such a shot! nomo bellissimo! who never robbed less than twenty crowns, or missed confession at Easter in his life!'

GOUGH, THE AMERICAN TEMPERANCE APOSTLE.

THE republication in this country of a little volume, of which seventeen thousand copies have been sold in America, makes us acquainted for the first time with a very remarkable young man, named John B. Gough, who has, within the last three years, sprung from the ranks of the working-classes in that country, and, we may add, from the degraded herd of the dissipated, and is now in the full blaze of popularity as an apostle of the Whitfield class, but in the immediate cause of total abstinence. The volume is entitled, 'The Hand of Providence Exemplified in the History of John B. Gough.'* It is chiefly an autobiography; and a most extraordinary revelation does it give of human error and misery. The author has evidently regarded it as a sacred duty to expose every circumstance in his career as a sinner, in order to tell upon the unhappy beings who are still under the bondage from which he is emancipated. There is much eloquence in the volume; and, what is more surprising, there is much naturalness and affecting simplicity. We therefore recommend it even to those who merely read for amusement, or with the general desire of studying the features of our common nature.

Gough was the son of an English private soldier, and came to America, at twelve years of age, in the service of an emigrant family, who undertook the care of him. In consequence of dissatisfaction with his treatment in this family, he found himself, at fourteen, a friendless adventurer in the streets of New York, with half-a-crown in his pocket. He got employment as an errand-boy; and by and by his mother and sister came from England to join him. The mother, however, who was an excellent person, soon after died; the sister went to a trade in another city; and the poor youth was once more alone in the world. It is easy to see that, with an ardent temperament and some lively talents, Gough was exposed, in such circumstances, to great danger. It is certainly not surprising that, when he attained manhood, his original moral impressions were obliterated, and he was become a person of reckless life. Possessing a good voice for singing, and a power of telling comic stories, he was tempted into the society of thoughtless young men, who taught him to drink. Then ambition led him to forsake his trade as a bookbinder for the stage; but meeting only with disappointment, he returned to work. Still, he was restless and unsteady. At about twenty years of age we find him engaged in a fishing adventure in the bay of Chaleur; and soon after he married the sister of the owner of the vessel. Before this time King Alcohol had marked him as one of his most devoted subjects.

At Newburyport, where he set up house as a married man, he for a little while maintained an effort at reformation. 'I recommenced,' says he, 'attending a place of worship, and for a short time I attended the Rev. Mr Campbell's church, by whom, as well as by several of his members, I was treated with much Christian kindness. I was often invited to Mr Campbell's house, as well as to those of some of his hearers, and it seemed as if a favourable turning-point or crisis in my fortunes had arrived. Mr Campbell was good enough to manifest a very great interest in my welfare, and frequently expressed a hope that I should be enabled, although late in life, to obtain an education. And this I might have acquired, had not my evil genius prevented

my making any efforts to obtain so desirable an end. My desire for strong liquors and company seemed to present an insuperable barrier against all improvement; and, after a few weeks, every aspiration after better things had ceased, every bud of promised comfort was crushed. Again I grieved the Spirit which had been striving with my spirit, and ere long became even more addicted to the use of the infernal draughts which had already wrought me so much woe than at any previous period of my existence.

'And now my circumstances began to be desperate indeed. In vain were all my efforts to obtain work; and at last I became so reduced, that at times I did not know, when one meal was ended, where on the face of the broad earth I should find another. Further mortification awaited me, and by slow degrees I became aware of it. The young men with whom I had associated in bar-rooms and parlours, and who wore a little better clothing than I could afford to put on, one after another began to drop my acquaintance. If I walked in the public streets, I too quickly perceived the cold look, the averted eye, the half-recognition; and, to a sensitive spirit such as I possessed, such treatment was almost past endurance. To add to the mortification caused by such treatment, it happened that those who had laughed the loudest at my songs and stories, and who had been social enough with me in the bar-room, were the very individuals who seemed most ashamed of my acquaintance. I felt that I was shunned by the respectable portion of the community also; and once on asking a lad to accompany me in a walk, he informed me that his father had cautioned him against associating with me. This was a cutting reproof, and I felt it more deeply than words can express. And could I wonder at it? No. Although I may have used bitter words against that parent, my conscience told me that he had done no more than his duty, in preventing his son being influenced by my dissipated habits. Oh how often have I lain down and bitterly remembered many who had hailed my arrival in their company as a joyous event! Then plaudits would ring in my ears, and peals of laughter ring again in my deserted chamber; then would succeed stillness, only broken by the beatings of my agonised heart, which felt that the gloss of respectability had worn off, and exposed my threadbare condition. To drown these reflections, I would drink, not from love of the taste of the liquor, but to become so stupefied by its fumes as to steep my sorrows in a half-oblivion; and from this miserable stupor I would wake to a fuller consciousness of my situation, and again would I banish my reflections by liquor.'

A kind-hearted countryman not only succoured him in his extremity, but set him up in business. Drink, however, brought him to ruin in five months. The details which he gives of his habits surprises us; for it is uncommon for the young in our own country to keep liquor constantly beside them in order to maintain an enduring intoxication. 'To what shifts,' he says, 'was I reduced in order to conceal my habit of using intoxicating drinks! Frequently have I taken a pitcher, with a pint of new rum in it, purchased at some obscure groggery, and put about one-third as much water as there was spirit in it at the town-pump, in the market square, in order to induce persons to think that I drank water alone. This mixture I would take to my shop, and for days and days together it would be my only beverage. In consequence of this habit I would frequently fall asleep, or, if awake, be in so half-torpid a state, that work or exertion of any kind was quite out of the question; and after an indulgence in this practice for some time, I was compelled to remain at home from sheer inability to enter on active duty. I grew of course poorer and poorer, and my days dragged wearily on. At times I almost wished that my life and its miseries would close.'

His wife having left him temporarily one morning on a visit, Gough, finding his home somewhat lonely, commenced drinking at a gallon of West India rum which

* London: Darton and Clark. 1846.

he had in the house. 'Although the morning,' says he, 'was not far advanced, I sat down intending to do nothing until dinner-time. I could not sit alone without rum, and I drank glass after glass until I became so stupefied, that I was compelled to lie down on the bed, where I soon fell asleep. When I awoke, it was late in the afternoon, and then, as I persuaded myself, too late to make a bad day's work good. I invited a neighbour, who, like myself, was a man of intemperate habits, to spend the evening with me. He came, and we sat down to our rum, and drank together freely until late that night, when he staggered home; and so intoxicated was I, that in moving to go to bed, I fell over the table, broke a lamp, and lay on the floor for some time unable to rise. At last I managed to get to bed; but oh! I did not sleep, for the drunkard never knows the blessings of undisturbed repose. I awoke in the night with a raging thirst. My mouth was parched, and my throat was burning; and I anxiously groped about the room, trying to find more rum, in which I sought to quench my dreadful thirst. No sooner was one draught taken than the horrible dry feeling returned; and so I went on, swallowing repeated glassfuls of the spirit, until at last I had drained the very last drop which the jar contained. My appetite grew by what it fed on; and having a little money by me, I with difficulty got up, made myself look as tidy as possible, and then went out to buy more rum, with which I returned to the house. The fact will perhaps seem incredible, but so it was, that I drank spirits continually without tasting a morsel of food for the next three days. This could not last long; a constitution of iron strength could not endure such treatment, and mine was partially broken down by previous dissipation.

'I began to experience a feeling hitherto unknown to me. After the three days' drinking to which I have just referred, I felt one night, as I lay on my bed, an awful sense of something dreadful coming upon me. It was as if I had been partially stunned, and now, in an interval of consciousness, was about to have the fearful blow which had prostrated me repeated. There was a craving for sleep, sleep—blessed sleep! But my eyelids were as if they could not close. Every object around me I beheld with startling distinctness, and my hearing became unnaturally acute. Then to the singing and roaring in my ears would suddenly succeed a silence so awful, that only the stillness of the grave might be compared with it. At other times strange voices would whisper unintelligible words, and the slightest noise would make me start like a guilty thing. But the horrible burning thirst was insupportable; and to quench it, and induce sleep, I clutched again and again the rum bottle, hugged my enemy, and poured the infernal fluid down my parched throat. But it was of no use—none. I could not sleep. Then I bethought me of tobacco; and, staggering from my bed to a shelf near, with great difficulty I managed to procure a pipe and some matches. I could not stand to light the latter, so I lay again on the bed, and scraped one against the wall. I began to smoke, and the narcotic leaf produced a stupefaction. I dozed a little; but feeling a warmth on my face, I awoke, and discovered my pillow to be on fire! I had dropped a lighted match on the bed. By a desperate effort I threw the pillow from the bed, and, too exhausted to feel annoyed by the burning feathers, I sank again into a state of somnolency. How long I lay I do not exactly know, but I was roused from my lethargy by the neighbours, who, alarmed by a smell of fire, came to my room to ascertain the cause. When they took me from my bed, the under part of the straw with which it was stuffed was smouldering, and in a quarter of an hour more must have burst into a flame. Had such been the case, how horrible would have been my fate; for it is more than probable that, in my half-senseless condition, I should have been suffocated or burned to death! The fright produced by this accident and very narrow escape in some degree sobered me; but what I felt more than anything else was the exposure.

Now, all would be known, and I feared my name would become more than ever a byword and a reproach.'

The consequence of this bout was an attack of delirium tremens, the sensations of which he describes with fearful fidelity. Returning to work as a journeyman, he endeavoured to indulge in his vice without exposing himself to the world; but with all his anxiety on this point, his habits became notorious, and he sank into disrepute and poverty at the same time. In the midst of domestic miseries thus produced, his wife and surviving child perished. He continued to drink while they lay dead in the room beside him. 'There, in the room where all who loved me were lying in the unconscious slumber of death, was I gazing, with a maudlin melancholy imprinted on my features, on the dead forms of those who were flesh of my flesh and bone of my bone. During the miserable hours of darkness, I would steal from my lonely bed to the place where my dead wife and child lay, and in agony of soul pass my shaking hand over their cold faces, and then return to my bed, after a draught of rum, which I had obtained and hidden under the pillow of my wretched couch.'

Amidst all this horrible conduct, he contrived to obtain at least occasional employment. We could suppose that there was something about him that awakened a kind interest in those around him, notwithstanding every delinquency. Indeed there can be no doubt, both from his earlier and his latter life, that there were noble natural elements in this man; only for the meantime enchained in debasement by passions to whose undivided control he had been exposed in the course of a morally unprotected youth. The good in him was every now and then endeavouring to break through. 'My custom,' he says, 'was to repair to the lowest grog-shops, and there I might usually be found, night after night, telling facetious stories, singing comic songs, or turning books upside down, and reading them whilst they were moving round, to the great delight and wonder of a set of loafers, who supplied me with drink in return. Who would have recognised in the gibing mountebank, the circle of a laughing, drunken crowd, the son of religious parents—one who had been devoted and affectionate not so very long before—one, too, who had felt and appreciated the pleasures which religion alone can bestow? At times my former condition would flash across my mind, when, in the midst of riot and revelry, conviction would fasten its quivering arrow in my heart, making it bleed again, although I was forced to hide the wound. And through the mists of memory my mother's face would often appear, just as it was when I stood by her knee, and listened to lessons of wisdom and goodness from her loving lips. I would see her mild reproving face, and seem to hear her warning voice; and, surrounded by my riotous companions at certain seasons, reason would struggle for the throne whence she had been driven; and I would, whilst enjoying the loud plaudits of sots,

"See a hand they could not see,
Which beckoned me away!"

Gough was a wretched, broken-down, half-ragged outcast, whom all had learned to shun, when one evening, towards the close of 1842, some one tapped his shoulder as he walked along the street. He could scarcely believe his senses, when, turning round, he found a person looking kindly upon him—the first time such a thing had happened for many months. This was an emissary of temperance, who had marked his miserable state. Gough was, by the winning kindness of this person, induced to come to a temperance meeting and sign the pledge. He felt at first a sense of relief, and a pleasure arising from the honest desire to keep a good resolution; but for a week his sufferings, from an enfeebled system, deprived of its usual though unnatural pabulum, were dreadful. Fortunately, by the persevering support of the good men amongst whom he had fallen, he was preserved from relapse. Behold now a strange metamorphosis—the miserable drunken book-

blinder finds that he can speak in public, with effect, upon his late errors! It is discovered that he has gifts calculated to be of great service in one of the highest of causes. His religious feelings return; his admirable inherent morale is fully evoked; a wonderful oratorical power breaks out in him. Multitudes come full of eagerness, and hang for hours upon the voice of one whom, a few weeks ago, all were anxious to shun. In short, Gough begins to circulate from one temperance meeting to another, until he finds it necessary entirely to abandon his original trade. During the two ensuing years he laboured with astonishing activity and success. 'From the 15th of May 1843,' says he, 'to the 1st of January 1845, I travelled more than twelve thousand miles by land and water; delivered six hundred and five public addresses in churches, halls, public buildings, and in the open air—one hundred and ten of which were in the city of Boston alone; and obtained thirty-one thousand seven hundred and sixty signatures to the total abstinence pledge.' It can only be mentioned to his honour, that he made *one lapse* a few months after taking the pledge, for he was the first to announce it himself; and his contrition appears to have been deep, sincere, and effectual.

Gough is now running the career of a popular orator in his own country. A gentleman who went from curiosity to hear him at Philadelphia, and was induced by his eloquence to take the pledge, describes the excitement previous to the orator's appearance as excessive. The scene is a church; and while a little group are pushing through the crowd towards the pulpit, intense curiosity is expressed to know which is *he*. At length a young man is distinguished. 'That's he!' whispers everybody to everybody else.

'What! that pale thin young man, with a brown overcoat buttoned closely up to his chin, and looking so attenuated, that a tolerably persevering gust of wind would have had no difficulty in puffing him to any required point of the compass—that him who has awayed multitudes by his oratory—made strong men weep like little children, and women sob as if their hearts would burst! Yes; look at his large expressive eyes—mark every feature—and you see the stamp of no common man there. The young apostle of temperance is before us.

'After a brief address from Mr Marsh, and a prayer from the pastor of the church, a hymn was sung, and then Mr Gough came forward. I had now a better opportunity of observing him. His face was pale, and there needed no very scrutinising eye to detect on the brow of youth furrows which time and trouble had prematurely ploughed there. His cheeks were very pale, somewhat sunken, and their muscles were very distinctly marked. The mouth, by far the most expressive feature of the face, was of a benevolent formation (if I may so describe it), and at times a smile of inexpressible sweetness lurked about it. A quantity of dark hair nearly covered his forehead, yet leaving one temple bare, indicating a brain of more than ordinary capacity. In dress he was extremely simple—plain black. Taken altogether, I have seldom, at a first glance, felt so lively an interest in any celebrated man (and I have seen many) as I did in Mr Gough.

'It would be easy enough to give the *matter* of Mr Gough's address; but to convey anything except a very slender idea of his *manner* would be a sheer impossibility, and I shall not attempt so hopeless a task. To be fully appreciated, he must be heard. He commenced by disclaiming any intention of entering on an argument, and said that he should mainly depend on facts, the results of his own experience, or those of others which had fallen under his notice. He then described his own career as an intemperate man, and drew pictures of such terrific power, and yet so truthful, that his hearers shuddered as they listened to the dreadful details. To *mo* intemperance had never before appeared in all its horrible, startling hideousness. The impressions made by Mr Gough on his audience

seemed to be profound; and many of his pathetic anecdotes drew tears "from eyes unused to weep."

'It being Sabbath evening, Mr Gough did not indulge in any reminiscences of a ludicrous nature, but confined himself to a delineation of the awful features of intemperance as exhibited every hour in our daily paths. His illustrations were marvellously felicitous, and most aptly introduced. Never did he utter anything approaching to vulgarity, and often his eloquence was of a high order. He told us that he had never known the advantages of education (a fact which none would have suspected); that he had left England at twelve years of age; had suffered from poverty and want in their direst forms; and had felt, when death had robbed him of all who made life dear, that he was utterly *alone*. It was the most awfully interesting autobiography I ever listened to.

'During that week and the week following Mr Gough lectured to congregated thousands in Philadelphia; and so fascinated was I by his eloquence, that, with the exception of two meetings, I heard all his addresses. The excitement was tremendous. To obtain any chance of hearing him, seats were obliged to be procured more than an hour and a half before the time of commencement. Gallery and pulpit stairs, and aisles, were thronged with people of every class. I shall never forget the scene at the Chinese Museum, where, on two occasions, three thousand people paid twenty-five cents for the privilege of hearing him; and even then, hundreds were unable to obtain admission. Mr Gough enchaind that vast audience for two hours by one of the most effective addresses I ever heard. At one moment he convulsed them with merriment, and then, as if by the touch of an enchanter's wand, he subdued them to tears. It was a wonderful display of his power over the feelings and passions; and yet, withal, there was so much of humility, that one knew not which most to admire—the man or his matter.'

ANALYSIS OF A PIECE OF MUSIC.

NOVELISTS and essayists have so frequently found the manner of the performance of what is called a 'piece of music' a fruitful theme for ridicule—beholding something so excessively ludicrous in the diffidence, whether affected or real, of the performer, and in the paidolatriy of some music-loving father or mother, as the musical young lady of the family is seated at the piano—that the subject is worn to a thread by the constant rough handling it has experienced. Let ours be the attempt to elicit a little amusement from the 'piece' itself, out of which it may be drawn perhaps quite as abundantly, and in a far more kindly manner, than if we were to satirise the timidity, or denounce the defects, of that large class of ill-used people, the piece performers.

'Pieces'—apt name! there is no such thing as an 'entire' in the technology of music—may be classed under the heads reprehensible and laudable. The first we consider, as including all variations or concerted pieces upon airs of intrinsic value—more's the pity; and the second, all other original music, such as overtures, oratorios, &c. Well, then, we may premise that all these reprehensibles have what is called an introduction, as if to beg your favour for what is to come. The introduction commences with a couple of bang-bangs—saving your ears—designed to call attention; and as they not unfrequently fail of this effect, not uncommonly they are made to extend along the first line, by which time, in common politeness, you must have been silenced. This extraordinary beginning is made to wear a particularly awful aspect, if the air is grave or sad, and is suffered to bear a more lively character if the same is more or less vivacious. These primary concussions are succeeded by a combination of the most

astounding successions of notes or 'runs' the ear can conceive—of which the main object would appear to be to make sure that all the notes of the piano are ready for circulation. One or two such eruptions follow; and then comes a pause; during which the exhausted player and the unfortunate playee are supposed to take wind, anticipatory of the charge which is to come. The introduction then proceeds to cut to pieces the air, which is to undergo future anatomisation throughout the twelve pages of the piece; and taking one little bit and putting it here, and another and fixing it there, it is judiciously contrived to convey an impression of the most profound obscurity, and uncertainty as to what is to be the nature, or what could possibly be the name, of that air. Thus we analyse the first five double lines of the first page. The sixth and last most commonly combines an extraordinary evolution—of which, to an unmusical reader, the best idea may be gathered by comparing it to a very active run up stairs, followed by an equally rapid run down, with two more concussions, and three or four notes, which leave an impression of vacancy on the ear, analogous to that which would be produced if, in the recitation of some lines of poetry, three or four words of the concluding line should be repeated, and the last few words necessary to complete rhythm and rhyme left out. As might perhaps be anticipated, the object of this curious conclusion to the introduction is to work up the curiosity of the hearer to that pitch of excitement which will make him most delighted to welcome the air as something which, after so much of the execrable, shall at least be tolerable.

Then comes the air, so soon to be cruelly victimised. It is the conception of some master-mind; and its sweet notes, its simple chords, and its unaffected grace, one would suppose would touch the hard heart even of a variation composer. No; never did sacrificial knife plunge more ruthlessly into the heart of an innocent garland-crowned victim, than does the scalpel of the composer dive into this unfortunate air. Why are not bad airs selected to be mangled and deformed—a proceeding which would be perfectly justifiable and laudable? The answer is, it is a grain of gold alone which can overspread a wire of baser metal, and give it its lustre for hundreds of yards in length.

Then we come to 'the variations'; so called, perhaps, because they differ as much as possible from the original air. The peculiarity about this, which forms the principal portion of the piece, consists in the ruthless manner in which all the most beautiful parts of the air are sliced up. Thus, if the piece consists of a series of variations upon the air of 'Auld Lang Syne,' the first line, 'Should auld acquaintance be forgot,' will be dealt with in this manner:—'Should,' and its corresponding note in the air, will be placed first at the beginning, then at the middle, and then at the end of a series of such runs up and down stairs as were before mentioned; and after having been shuttlecocked through many a bar, will be cast aside, to give place to a novel succession of the same, or similar manoeuvres, to be played off upon 'auld-acquaintance-be-forgot.' The chances are twenty to one if the last variation will not prove a relentless massacre of the air entire, ingeniously effected by some alteration of its measure, or by a reset of the same notes with the interposition of a few very original ones into a set of quadrilles, or a waltz, or a polka, or some such other intricate composition. But the piece of music has its end, long and tedious as it may be. The finale comes at length to close the scene, and commences by the performance of the air in its un mutilated proportions, which must be looked upon merely as a placebo for that which is to come. Then succeed

fresh scamperings up and down—we mean along the key-board; and then our by-this-time very 'auld acquaintance' is caught up again, and becomes symbolised by a profusion of shakes, unquestionably illustrative of the perfect heartiness of the welcome of such an 'auld-lang-syne' friend; while 'never brought to mind' is given with dreadful pathos, as if, at the bare supposition of such an event, the entire body of the instrument were falling into convulsions. And thus to the melancholy end of the song; until its metamorphosis is so complete, that, to the best of our conceptions, were its venerable old composer to awake from the tomb, and behold his unhappy offspring in its new clothes, there could scarcely be a possibility of his recognising it.

To us by far the most amusing, as well as the most welcome portion of the piece, is that which forms its absolute conclusion. The great fun here seems to be just this—that you are to be continually deceived as to the downright end of all. Long before ever the last page is executed, one would be ready to swear that the whole was done; yet just as your mind is made up about it, there comes a surprising explosion, which undoes all that had been done before. Then you are carried over the same ground again. Surely here we are at last at the terminus? Vain is the hope! You turn away in despair, out of which nothing can arouse you but the thunder of the actual end, which seems as if the piano had been stuffed with gunpowder, and set light to—an explosion which is followed by the final prolonged growl of the weary bass, as it goes back to a state of rest.

To be serious. What, in the abstract, can be more absurd than such a composition as that we have been analysing—successful only in this, that it mutilates the beauty, and destroys the stern, solemn, and venerable aspect of our national airs? What can be greater than the folly of cutting to pieces such airs as 'Auld Robin Gray,' 'Scots wha hae wi' Wallace bled,' 'Rule Britannia,' 'God save the Queen,' 'Of a noble race was Shenkyn'—preserving only enough of their peculiarities to render them occasionally recognisable, if so much, and converting alike the most grave, mournful, and touching airs with those whose associations and antiquity entitle them to our regard and respect, into such harlequinades as quadrilles and waltzes? It is as if a modern upholsterer were to trick out with the gay decorations of our time the sober and majestic grandeur of some gray old castle.

Such is a species of caricature upon the original airs, which, if it applied equally to the words, no person would fail to condemn. And who will tell me that the words, either for their beauty or appropriateness, are entitled to more respect than the music which conveys and animates them?

There is a rage in the present time for hunting up the very noblest of our airs, and transmuting them, with the addition of a large quantity of alloy, into quadrilles and polkas; and thousands of giddy feet dance to parodies of that music which, at another epoch, fired the courage of our ancestors, and kindled their valour on the field of battle.

I could almost wish that the pibroch and harp had been silent, rather than that their outpourings, at the most solemn and pathetic seasons, should be mimicked in the polka, the waltz, or the quadrille.

Of the national music of our sister country we say nothing, but that the airs seem principally made to be danced to, and that fightings and burysings appear to be regarded in such a funny light, as to divest us of much of our pity when we behold them cleverly dissected under the experienced hands of some of our modern composers.

As all reformations are works of time, we lay down our pen without any over-sanguine expectation of, in our day, witnessing such a revolution entirely accomplished as that the class of compositions we have shortly criticised shall be no longer in existence. Posterity will look back upon them as amongst the follies and infirmities of our period, and perhaps some bl-

millenarian reader, in looking over a *few* of our back numbers, will appreciate our effort and say, and perhaps write to the editor and tell him, that here was another essay fifty years before its time.

GEOLOGICAL CONNECTION OF BRITAIN AND FRANCE.

It has long been a favourite subject of speculation whether the island of Great Britain was not formerly a part of continental Europe, the junction being at what is now the Straits of Dover; in other words, whether France and England were not conjoined by a narrow isthmus, just as Africa is united to Asia by the isthmus of Suez, or North and South America by the isthmus of Panama. This opinion, startling to those little acquainted with geological phenomena, was entertained by Volscus, Niger, Honoratus, the French poet Bartas, and by several of our own early writers, as John Twin, Dr Richard White, and Richard Verstegan. So late as 1753, a society at Amiens made it the subject of a prize essay, which was gained by the philosopher Desmarcet, then beginning to attract attention by his talent and ingenuity. The latter founded his arguments chiefly on the identity of composition of the cliffs on the opposite sides of the strait—on a submarine ridge which extends from Folkestone to Boulogne, at a depth of only fourteen feet at low water—and on the identity of the noxious animals in England and France, which could not of themselves have crossed the existing channel, and which could never have been introduced by man. The demolition of the isthmus he attributed to the preponderating violence of the oceanic current from the north, and to a slight elevation of the German Ocean above the waters of the English Channel. Desmarcet's views are generally entertained by modern geologists, and, among others, by Mr Lyell, who observes—'It will hardly be disputed that the ocean might have effected a breach through the land—which in all probability once united our country to the continent—in the same manner as it now gradually forces a passage through rocks of the same mineral composition, and often many hundred feet high, upon our own coast.' It is not to add any new argument in support of this theory that we now direct attention to the subject—for we believe most geologists are at one as to the former union of the two countries—but to draw attention to the views and arguments of Richard Verstegan, which were published two hundred and forty years ago, and from which, one would think, Desmarcet has borrowed everything of value in his celebrated Prize Essay. Verstegan's opinions are given in the fourth chapter of his 'Restitution of Decayed Intelligence in Antiquities, concerning the most noble and renowned English Nation'—a rare and curious volume of considerable merit, dedicated to James I. of Great Britain. We shall here extract his principal arguments, merely modernising the orthography, so as to render them more readily intelligible to the ordinary reader.

Referring to the great resemblance between the cliffs of Dover on the one side of the Channel, and of Boulogne on the other, he justly observes that they are both of one kind of substance; 'that is, of chalk and flint, the sides of both towards the sea plainly appearing to be broken off from some more of the same stuff or matter that it hath some time by nature been fastened unto; the length of the said cliffs along the sea-shore being on the one side answerable in effect to the length of the very like on the other side, and the distance between both not exceeding twenty-four English miles, are all great arguments to prove a conjunction in time long past to have been between these two countries, whereby men did pass on dry land from the one unto the other, as it were over a bridge or isthmus of land, being altogether of chalk and flint, and containing in length about the number of miles before specified, and in breadth some six English miles or thereabouts; whereby our

country was then no island, but a peninsula, being thus fixed unto the main continent of the world.

'Some may here object that other hilly parts of cliffs of the sea-shore are in many other places seen to be broken away, as steep and as straight down as these here spoken of; which I confess to be true, and thereunto do answer, that it is a plain sign that the violence of the sea has so worn and eaten out the sides of them beneath at the bottom, that the upper part, for want of under-propping, hath fallen down. And, moreover, where it also is found that inland rocks or hills are seen to have had some part of them broken away, as I have observed in passing the Alps and other mountains, this may well be thought to have proceeded, in old time, by occasion of earthquakes; but the breaches found in rocks are never seen to pass all along in any sort of evenness, but here and there without any kind of course or order. Besides, they are formed craggy by nature, or the wind and the rain having long since beaten away the earth from them, may thus have left them to appear the very true anatomies of themselves.

'It is further to be noted, that in our ancient language the cut off or broken mountains on the sea-sides are more rightly and properly called cliffs, than by the name of rocks or hills, that appellation being more fitting unto the inland mountains; but the name of cliff, coming from our verb to cleave, is unto these more aptly given, for that they seem unto our view as cleft or cloven from the part that some time belonged unto them; and albeit (as I said before) many cliffs are in many places of the sea-shore to be seen, as well as at Dover, yet are they not seen so to be answered and corresponded unto by others right over against them, nor to be of such nearness, and such self-matter or substance, as these have here been shown to be. This conjuncture to have remained for some space after the great and general deluge, and the breach and separation of England from France by the said deluge not to have been caused, is by sundry reasons to be proved.'

Our author here proceeds to show that the Netherlands and adjoining low countries formed, at no very distant period, the bottom of the ocean; in other words, that the German Sea then extended over a considerable portion of the present continent of Europe. He thinks this is abundantly evidenced by the general flatness of the country; by the nature of the soil, which is, to a great depth, an admixture of sand, gravel, and other oceanic silt; and by the fossil remains found far inland, such as beds of shells in the undisturbed position of their growth, the skeletons of large cetacea, and other marine exuvie. These shells, he maintains, could not have been brought together by the deluge, which was a temporary and violent cataclysm, and would consequently have deposited in a confused and broken manner; but must have grown and increased *in situ* for many centuries after the flood, and ultimately have been deserted by a quiet and gradual recession of the sea. 'An apparent reason,' he continues, 'must then be sought how it hath come to pass that these Netherlands, having been sea, have become to be land; and if so be that this question were moved of such parts only of these countries as Holland and Zealand, and their confines, which may, by the sea's inundation (as before hath been said), easily be drowned and made sea again, it might, by the ordinary answer that the sea doth often gain in one place and lose in another, soon be resolved. But speaking of these parts of Flanders and Brabant, which having been sea, and being become land, can no more, by any inundation, be made sea again; this, I say, requireth an imminent reason to be sought for, the which cannot be found but in the breaking of the German Ocean through that isthmus or narrow passage of land which once conjoined England to France, by which only means the sea, finding out a new course, all the even parts of the Netherlands having (as is aforesaid) before been sea, become afterwards dry land; even as by common experience we see that watery or moorish grounds are drained dry, when an issue may

be found to lead away the water to some lower channel, pool, or river. And even so, in like manner, this breach in our isthmus being once made, and the sea having been before the said breach somewhat lower on the west side thereof than on the east side, the course of the water, by a natural readiness, taking scope down through this new channel (which before was only a kind of gulf, as is the Red Sea) towards the most huge western ocean, the greater divider of Europe and Africa from the late-found America, it did without all doubt work this great effect; and no way is there else to be found or imagined whereby these seas might be drained or drawn away, to make these former shallow places to appear and become dry land, but only by this way and course.

'That the sea on the west side of the said isthmus was lower than the sea on the east side thereof, is, besides this great work thereby wrought, to be judged by the sundry flats and shallows on the east side, as well on the coast of England as of Flanders; yea, one in a manner lying between Dover and Calais, of about three English miles in length, of some called our Lady's Land; and contrariwise on the west side, no such flats at all to be found, whereby may well be gathered, that as the land under the sea remaineth on the one side lower than on the other, so accordingly did the sea also. It is, moreover, to be judged by the very present egress of the sea, for it is observed that the current of the water is more swift down the channel towards the west, than from the west unto the east; old shippers of the Netherlands affirming that they have noted the voyage from Holland to Spain to be shorter by a day and a-half's sailing than the voyage from Spain to Holland. That seas are different in height one from the other, even in places where they have but narrow separations of land between them, is very manifest; as in the case of the Red Sea and the Mediterranean—the former being many feet higher than the latter.

'Another reason there is that this separation hath been made since the flood, which is also very considerable; and that is, that the patriarch Noah, having had with him in the ark all sorts of beasts (all else besides throughout the whole world being destroyed), these, then, after the flood being put forth of the ark to increase and multiply, did afterward in time disperse themselves over all parts of the continent or mainland; but long after it could not be before the ravenous wolf had made his kind nature known unto man, and therefore no man, unless he were mad, would ever transport of that race, for the goodness of that breed, out of the continent into any isles; no more than men will ever carry foxes (though they be less damageable) out of our continent into the Isle of Wight. But our isle, as is aforesaid, continuing since the flood fastened by nature to the great continent, these wicked beasts did of themselves pass over; and if any should object that England hath no wolves in it, they may be answered, that Scotland being therewith conjoined, hath very many, and so England itself some time also had, until such time as King Edgar took order for the destroying of them throughout the whole realm.

'But now, whether this breach of this our isthmus were caused by some great earthquake, whereby the sea, first breaking through, might afterward by little and little enlarge her passage, or whether it were cut by the labour of man, in regard of commodity by that passage, or whether the inhabitants of the one side or the other, by occasion of war, did cut it, thereby to be sequestered and freed from their enemies, must needs remain altogether uncertain; but that our isle hath been continent to France, and that since the deluge, hath been shown; and although not out of the writings of old authors, yet by evident reasons and markable demonstrations, such as well in this case are to be allowed for sufficient authors; yea, and that before such as might perhaps deliver us some such report upon some other's hearsay, and want such due proofs as here have been alleged to confirm it. And no marvel is it that in old authors no relation of this is found, considering

that they must be very old that hereof must make mention; yea, they must have been such as in those times must have lived about these parts, or had good means from these parts to have understood it; both which, considering those so very ancient ages, and the want of knowledge of letters generally of all people in these parts of Europe, cannot possibly be expected.'

Such are the arguments of old Verstegan; and, considering the state of science at the period when he wrote, one cannot help giving him the credit of extraordinary ingenuity and knowledge. After the lapse of a century and a half, Desmarest only followed in his footsteps; and modern geologists, with all their additional facilities, can add but few if any facts of importance to those advanced by the restorer of 'Decayed Intelligence.' It is true that the cause which he assigns for the emergence of the Netherlands, even if it had existence, would only partially account for the result. We must seek for the main cause of this phenomenon in that gradual upheaval of the European continent which is so abundantly demonstrated by the raised beaches found all along the shores of our own island, as well as those of Scandinavia, France, and Portugal. But dismissing altogether the argument drawn from this source, we have still in Verstegan every item of evidence which others have adduced to prove the former geological union of England and France. Recent soundings have shown that the German Ocean gradually becomes more shallow toward the Straits of Dover, till it reaches a minimum of some sixteen or eighteen fathoms; and that so soon as the Straits are passed, the English Channel gradually deepens towards the west, so that the narrow channel between Dover and Calais may be said still to part two great seas. We have evidence, too, that the cliffs on each side are yet subject to a considerable waste—an estimate of which may be formed from the fact, that those at Folkestone have, within the memory of persons living, been washed away to the extent of ten rods. These, and a few similar minutiae, which tend to corroborate the opinions of Verstegan, are all that can be gathered from recent sources; so that to him may be fairly ascribed the honour of attempting, on philosophical grounds, to demonstrate that at one time 'our country was no island, but a peninsula fixed unto the main continent of the world.'

STORIES AND TRANSLATIONS FROM TASSO

II.—ODOARDO AND GILDIPPE.

THE story of Odoardo and Gildippe gives a pleasing picture of wedded love, which will make it not inappropriately follow the episode of Olindo and Sophronia. Gildippe is one of those warlike heroines in which Tasso seems so much to delight, and which, though a little repugnant to our modern ideas of woman's sphere and character, are yet quite in accordance with the age depicted in the poem. At the period of the Holy Wars, when old age quitted the peaceful fireside for the tumult of battle, and even childhood left its sports to follow arms,* it was not surprising that woman should forget her weakness in the general enthusiasm. And surely, if anything could justifiably allure a woman from the scene of her quiet domestic virtues to a life of warfare, it would be the high and holy motive of conjugal love. Therefore Gildippe seems feminine

* A French boy, of the age of twelve, seized with enthusiasm, travelled through France in, we believe, the reign of St Louis, declaring that the Holy Sepulchre could only be won by children, and that he was sent to command the infantile army. Such was the fanaticism of the time, that numbers of the nobility sent forth their children on this wild exploit. The poor young creatures wandered through Europe, asking at each town 'if this was Jerusalem?' Many of them perished on the way, some were shipwrecked in the Mediterranean, and none ever reached the Holy City.

and loveable, even in the midst of war and carnage; in this excellent even the noble and beautiful Clorinda.

The episode of Gildippe and Odoardo extends over the whole poem. Tasso takes it up at intervals, and then relinquishes it for the history of some more prominent character. The first time the poet alludes to this faithful pair, is when he is enumerating the chieftains of the allied army before Jerusalem. He has been recounting the names of the Lombard generals, and bursts forth thus: 'Oh Gildippe and Odoardo, wedded lovers! whither do ye beguile my muse, already wearied with enumerating so many glorious names? Oh tender pair, united in battle as in marriage-bonds, death only can have power to separate you!' Tasso then continues—

In love's dear school what lesson is not taught?
There learnt Gildippe warrior brave to be;
Ever at her beloved's side her lot,
Their lives entwined, hang on one destiny.
No blow could fall on one, that wounded not
The other, suffering in fond sympathy;
One being struck, the other seems to languish;
One pours forth blood, the other tears of anguish.

After this pleasing description of their perfect union, the loving pair are not again mentioned until the ninth canto, when Gildippe appears in the battle with Soliman. She meets with Clorinda, and the two Amazons—Pagan and Christian—try their prowess in single combat, until Guelph, a German leader, comes to the succour of Gildippe. Tasso is again silent as to the fortune of these wedded lovers, until the last canto, when he describes the concluding and victorious assault of the Crusaders upon Jerusalem. And here the stanzas which precede the continuation of Gildippe's story present to the mind's eye such a vivid and beautiful picture, that, although scarcely connected with the tale, we cannot resist translating them:—

Great was the sight, and wondrous to behold,
When face to face the opposing armies came.
Ranged in long order stood the squadrons bold,
Ready for the assault, athirst for fame;
In the free wind waved every banner's fold,
And tall plumes nodded over casques of flame;
Jewels, devices rich, gold vestures, shone,
And bright steel darted lightnings in the sun.

The multitude of spears on either side
Make both the armies like dense forests seem;
Each lance is laid in rest, each bow-string tried;
The slings are made, the quivering javelins gleam.
While each proud charger scents the battle wide,
And seconds its bold master's glory-dream;
Neighing, it paws the ground in noble ire;
The swelling nostrils breathe out smoke and fire.

Beautiful in its horror is the sight,
From all its fearfulness in rapture born;
Even the loud, harsh trumpets give delight
To the glad ear—even the wild-ringing horn:
The Christian bands, though fewer, seem more bright
In dress and armour, which their ranks adorn;
Clearer their warlike shrill-voiced trumpets sound,
More gaily flash their weapons fair around.

Their trumpets give the signal; loud replies
From forth the Pagan army wild resound;
The Franks, with bended knees and reverent eyes,
In deep contrition kiss the holy ground;
The space that 'twixt the two ranged armies lies
Grows less, then vanishes. Together bound
In deadly conflict, now both wings engage,
And the front troops press on with equal rage.

What noble hand now struck the foremost blow,
And deathless honour from the victory gained?
'Twas thine, Gildippe, thine, which laid all low
The proud Hyrcanus, who in Ormus reigned;
Such glory Heaven, all-seeing, did bestow
Upon a woman's hand. The dart remained
Within Hyrcanus' breast; he, dying, gave
Praise to the hand that sent him to the grave.

The bard then goes on to relate how his fearless heroine slew other chieftains of the Pagan army—Tossiro, Artaxerxes, Alarco, &c.; particularising the manner of their death. These stanzas we pass over, and proceed to the next.

And others, whose bright names the rust of ages
By slow degrees has overcrept, she slew;
The Persians gather where the battle rages,
For the rich spoil that glitters in their view;
But fearful love the faithful spouse engages
To seek his dear one in this danger new;
Now joined in arms, advance the noble twain,
And added strength from that close union gain.

A warfare new and strange they now essay,
This generous and love-united pair;
Each one, of self regardless, strives away
To guard a dearer life with anxious care;
Gildippe's fearless arm drives far away
The blows that menaced her beloved there;
He, circling round, defends her with his shield,
Willing his life in that fond cause to yield.

This picture of loving union throws a charm over even the horrors of the battle-field. 'While these twain made fierce havoc among the Persians,' continues the poet, 'the king of Samarcand did the like among the Christians. Death followed wherever his tall charger was seen. Happy the Frank who was slain by his weapon, and not trodden under his horse's feet!' Gildippe alone dared to oppose the barbarian monarch. 'She struck him where the diadem on his helmet gleamed in purple and gold; and the haughty head was forced to bend. The Pagan king, in rage and fury, returned the blow, and the Amazon fell senseless; but her faithful husband supported her in her seat. Fortune favoured them, or perchance the king respected her courage, for he ceased the attack. So the bold lion, disdaining a fallen man, looks upon him, and passes by.'

The poem hastens to its close; and Tasso once more leaves Odoardo and Gildippe, and relates the progress of this last great battle. Many stanzas after, he again returns to them in this stanza—

Oh, fair Gildippe! Odoardo true!
Your noble deeds and your most bitter fate,
As far as these my Tuscan rhymes can do,
I, in a stranger's tongue, will consecrate;
That every age may fondly point to you,
And your tried love and valour celebrate;
And every loving heart in after years
Bedew my mournful song with plying tears.

Gildippe spurred her courser where the Sultan Soliman was carrying death and slaughter among her Christian brethren. She wounded him, and his shield fell to the ground. He, recognising her, called her opprobrious names. 'Better would it be for thee, oh, vile woman!' he cried, 'did thou use the needle and the spindle, than the sword and spear.'

He ceased, and by unrighteous fury driven,
Directs a cruel and impetuous blow,
Which pierces through Gildippe's cuirass, even
To that soft faithful breast which thrubs below.
From her weak hand her courser's reins are riven,
Upon the earth she falls, down sinking slow.
The wretched Odoardo sees her fate,
A vain defender, powerless, but not late.

Wo for the tender spouse! Revenge and love
Strive in his heart, and goad him fiercely on;
Love to his dear wife's succour does him move,
Revenge her cruel fortune to atone
Upon the slayer; his true love to prove,
He both these impulses fulfils in one;
His left arm folds her close with fondest care,
The right hand his avenging sword does bear.

But his firm will fails, aided not by might,
Against the powerful foe with victory swelling;
Helpless to shield his love, or meet in fight
Him who her soul chased from its baneful dwelling;
The faithful arm one fierce blow severs quite,
From its support the burden dear compelling;
Gildippe sinks to earth: he, struck with death,
Soon follows, clapping her with dying breath.

As a tall elm whom the fair matron-vine
In nuptial bonds encircles closely round,
Cloven by axe, or thunderbolt divine,
Falls sudden, bearing with it to the ground
Its spouse, and tears the green leaves whose fond twine
Adorned it, and the clusters rich that crowned;
While its bent boughs a requiem faint are sighing,
Not for itself, but her beside it dying:

So Odoardo falls; but mourns alone
 Her now for ever with him joined in fate;
 Both strive to breathe one tender dying tone;
 Words fall in faint sighs inarticulate;
 Their loving gaze meets mingled into one;
 Closer they cling together, ere too late;
 At once light fades upon each closing eye;
 United, up to Heaven the fair souls fly.

D. M. M.

POPULAR INFORMATION ON SCIENCE.

CILINARY MOTION.*

If a common sea mussel—the upper valve being removed—is placed upon the field of a microscope of very ordinary magnifying powers, and its outer edge carefully examined, it will be noticed that sundry minute particles of dust, which have accidentally fallen into the liquor of the shell surrounding the fish, are being hurried, in apparently rapid motion, along the edge, and in other directions over the surface of the creature, by no means in a confused or uncertain manner, but in determinate and unchanging directions. The motion will continue for a length of time after the fish is opened, occasionally becoming very faint and indistinct; and then, by the addition of a little sea-water, recovering its former vigour. After a time, however, it ceases entirely, and cannot then be restored. This motion is termed 'ciliary motion,' from a cause which will be immediately obvious. If now the magnifying power of the instrument is increased, and the observation is directed to the very edge of the floating portion of the mussel—forming a part of the gills—it will then be seen that there are a number of minute hairs, or hair-like processes, which form a fringe to the margin. These are agitated by a series of movements of a very singular character; the motion has been aptly compared to waving of corn before the wind, a comparison which will convey the best idea of the phenomenon to those who are unable to witness it. A series of rapid undulations may be observed to affect these minute organs, as if they were bent before the stream of agitated water which is passing along them, the reverse being true; namely, that the motion of the water and its particles is due to the unceasing agitation of the processes, which act as so many fans to impel it onwards. These little hairs never move in the opposite direction. Thus, if the motion is from right to left, it never changes to one from left to right. This is most remarkable when a small piece of the gills is cut off with a pair of scissors, and examined: it will be seen to move through the water in precisely the opposite direction to the motion of the processes, proving the independence of the movement with reference to the control of the animal, its persistence after a portion only of the membrane is separated from the body, and the unalterable character of the movement. These minute hair-like organs have received the name of 'cilia,' from a Latin word signifying the hair of the eyelids.

Ciliary motion is found in almost all classes of the animal kingdom; from the humbler orders of infusory animalcules, even as high in the zoological scale as man himself. There are probably few other phenomena common at once to the lowest and most exalted classes of organised beings. It is singular to find that its importance to the existence and wellbeing of the creature is inverse to the rank, so to speak, borne in the scale of creation by the creatures in which it has been discovered. In the higher orders of animals—the vertebrated—it performs a useful, but not a very important part, and is found in the lungs and respiratory passages, keeping them clear from obstruction by producing a motion in the direction of the outlet, and impelling the secretions of those organs in that direction in which they will find their easiest escape. It is in

the more lowly forms of existence that we are to find examples of its more interesting functions—in the microscopic animalcule, the polype, and the sponge.

The sea mussel is provided with cilia over its entire respiratory surface. Their motion may be watched—and a curious amusement it is—by throwing a little fine charcoal powder into the water. A current is seen to set inwards at several points, and another to emerge from the shell. This may be seen before the shell is opened; when opened, the powder is seen to be conveyed by the water over the gills and their appendages, to penetrate underneath the mantle or cloak, as it is called, and then is carried to the excretory orifice of the animal. It is by this means that the water is renewed over the entire respiratory surface; and when one portion of it is deprived of the oxygen it holds in solution, it is made to give place to another, with a fresh supply of this important ingredient. It is thus, in short, that the mussel breathes: a cessation of its ciliary motion being equivalent to suffocation in higher classes of animals. The fact is inexplicable, but it is a well-known truth, that pure fresh water instantly stops this motion in the sea mussel.

Ciliary motion is not confined, in this creature, to the mature individual, but exists even when the mollusc is in its embryotic state. Take the minute egg, not more than a few days old, and the little neride containing the embryo will be seen revolving, in the fluid which surrounds it, in a spiral manner, describing circles of almost mathematical precision, while the little embryo within also sets up a similar motion, traversing round and round the interior of the neride, like a planet in its orbit. This remarkable phenomenon was first discovered by a celebrated physiologist, Leuwenhoeck,* who writes, 'that he was so much delighted with the spectacle of the young mussels turning round within the egg, that he spent two hours, along with his daughter and his draughtsman, in contemplating it.'

Previous to the improvements now made in the microscope, and in conducting microscopic researches, these movements were attributed to a series of attractions and repulsions exerted on the surrounding fluid by the body of the animal: one of those foolish evasions of a direct confession of ignorance, with which the sciences at a former period were obstructed and encumbered. The motion is distinctly referable to cilia, which have been discovered on the surface of the embryo—the object to which it is subservient is, as in the grown mollusc, the renewal of water for respiration; and it is noticeable that the cilia are placed in that portion of this very young embryo where, at a future time, the gills are to be formed—the gills being its organs of respiration.

In the ova of the frog, the water-newt or salamander, both inhabitants of every reedy pool, and others of the batrachian reptiles, the same curious phenomenon has been discovered; and minute currents of water, in different directions, are seen to cross the surface as soon as the little creature is itself at rest. The surface of the tadpole, which is the young frog in the earliest stage of its existence, is completely covered with cilia. Under a good microscope, the tail of these tiny creatures forms an extremely pretty object. At its margin, the cilia are distinguished by their flashing appearance; and if a little piece is snipped off, it will swim rapidly through the water; or, if ciliated on one side only, it will revolve just as a boat when impelled only by one oar at the side. As the creature advances to maturity, it loses these organs.

In these few instances we have seen illustrations of one of the fundamental functions of the ciliary movement—the renewal of water for respiration; and we can scarcely too much admire the simplicity and efficacy of the apparatus by which this end is accomplished. As the motion is involuntary in most cases, where this is the only object to be gained, the animal is unconscious of the fatigue of respiration—a provision which, when

* For an ample and laborious research into the anatomy and physiology of these organs, the reader is referred to a monograph of Dr Sharpey's, in the *Cyclopædia of Anatomy and Physiology*.

* Quoted by Dr Sharpey.

the density of the respirable medium, water, is considered, strikes us with peculiar force.

The production of locomotion is the second of the intentions of ciliary movement, and is often combined with another effect of an interesting nature—the capture and prehension of the food. It has been observed, that when a live sponge is watched in its native element, numerous little particles contained in the water are carried at some points into its substance, and are emitted at others. This motion is incessant, and takes place at every part of the surface. The sponge, it may be mentioned, is now thoroughly believed to partake of an animal nature. If closer attention is bestowed upon the creature, the water is seen to pour from the summit of the little conical eminences studding the surface, and to enter in at the numerous minute pores which perforate the rest of the substance. Cilia have not yet been discovered in the sponge; but there is no doubt that, though so minute as to escape the powers even of our best microscopes, they produce these currents—impelling the water through the channels of the sponge to the openings where it escapes, and thus causing an influx to supply its place. In the ovule of this and other zoophytes, cilia have been distinctly made out, which, by analogy, affords strong reasons for believing them to exist in the adult animal. Dr Grant, who has minutely investigated the microscopic structure of sponges, has remarked that the ovum possessed cilia only at one portion of the surface; the tail, so to speak, being uncovered. In consequence of this arrangement, the larger end is directed forwards. When the ovum is detached from the parent, the cilia endow it with the power of locomotion; and it is immediately thus transported to a distance from the parent, swimming straight forwards until it meets with some object to which it can be attached. From that period the cilia produce currents in the surrounding water, for some time serving principally as respiratory agents; and when the animal is matured, becoming, in addition, the means of drawing its food into its substance. How remarkable a provision for the dissemination of the individual! The polype—in which it is also found—and the sponge possessing a fixed character, which assimilates them to the vegetable kingdom, are unable to secure themselves from the overgrowth and localisation of their offspring; but we see that the little ova are temporarily gifted with locomotion to a degree sufficient to carry them to an appropriate situation for their future growth, and thus the same end is obtained—a provision which will immediately suggest its analogue in the vegetable world, where, by many beautiful mechanical contrivances, with others of an almost life-like character, the perpetuity and dispersion of the species are secured. The down of the thistle, and the cilia of the young polype, afford us striking examples of the harmony and wisdom of design pervading the works of Providence.

The adult polype is indebted to these little organs for the capture of its prey. Many polypes, as the Campanularia, or Bell-flower species, are provided with fringes of feelers, or tentacula, surrounding their mouths; these are beset with rows of cilia, which, when the creature is at rest, produce rapid currents and eddies in the water. Their motion is so arranged as to propel the water containing their prey into the mouth of the polype; there another class of cilia whirl them round the throat, and subsequently around the stomach; and such particles as are inappropriate for food are cast back, and appear with the water to form an issuing stream from near the mouth of the creature.

At the bottom of the scale, cilia form appendages of the utmost value and importance, and are found to discharge the three functions already enumerated in the same creature. Infusorial animalcules of the simplest class and most primitive structure are covered with them, so as to appear quite hirsute beneath the microscope; their amazing activity—an activity so disproportionate to their size—impelling them to unceasing motion, is solely due to the surface-covering of cilia,

which act like so many dwarfish oars to propel the creature along. The comparison, singularly, is more faithful than might at first appear, since the motion of the cilia is precisely similar to the motion of an oar: the process describing a cone in its revolution—the centre of motion being seated at its root, as at the rullock, or row-lock, of the boat.

The wheel infusorial animalcule presents us with a modification of ciliary motion which long puzzled the microscopic anatomists of another day, many of whom were at a complete loss to account for the anomaly, as it appeared to them. The cilia are arranged in circles, upon the end of two little processes, placed generally near the greater extremity of the creature. When the attention is directed to these circles, they bear precisely the appearance of two diminutive cog-wheels revolving on a central axis; their motion is not constant in the same direction, but alternates, and is first in one direction, and then in the opposite. Leuwenhoeck says, 'imagine two wheels set round with points of needles, and moved very swiftly round from west by the south to the east.' We cannot conceive of any such rotatory motion in the living body, as it requires the disunion of the circumference of the wheel from the axis before it can be commenced; only to mention which, is sufficient to show the impossibility of this rotation being real.

It is an optical illusion, to use an expressive, but incorrect phrase, and has been attributed by Dr Sharpey to the effect of a series of undulations passing around the circle, and following each other with great rapidity in every part of the circle, which would convey to the mind the impression of a rotatory motion. Analogous, though differently placed, to the giant paddles of a steamboat, they carry the creature through the water, are subject to its control, and are set in motion or arrested at its pleasure. They produce, when the animalcule fixes itself, circular eddies or whirlpools in the water, whose motion is so vigorous that Leuwenhoeck remarks, that many animalcules, possessed of tolerably strong powers of locomotion, when they came within them were whirled about for some time; into these vortices, those particles which form the food of the wheel-animal are, as it were, aspirated, while it rejects those which are unfit for that purpose, and throws them back. Many of these rotiferæ are not endowed with locomotion, but adhere to the leaves and stems of aquatic plants; and in them the object of the motion is obviously to bring from the surrounding water the food of the animal into its mouth.

It must not be forgotten that the organs we have thus shortly described are, though of such consequence to the creatures they are found upon, yet of an amazingly minute size. In the mussel, where they are said to be rather large, they do not measure more than the thousandth of an inch in length; in some other animals they have been estimated to be as small as the twenty-five thousandth of an inch long; so that, were a hundred thousand cilia laid end to end, they would only measure four inches in length! These are expressions of size, however, which give an indifferent idea of their excessive minuteness to the reader unaccustomed to microscopic research. A more adequate conception may perhaps be formed from the reflection, that a drop of water may contain some thousands of microscopic animalcules, whose dimensions are so minute as to call for the use of some of the higher powers of the instrument for their detection. Now the general surface of these beings is covered with cilia. Ehrenberg, the zealous and patient investigator of the infusoria, conceives that he has detected at the base of each cilium a minute muscle, which he supposes confers motility to the organ.

It is remarkable, however, that electricity, otherwise an almost universal excitant of muscular contraction, appears to exercise no perceptible influence upon ciliary motion. A Leyden jar has been discharged through a mussel, but the experiment was productive of no visible effect, either in the retardation or acceleration of the movement.

It has been already observed that pure fresh water instantaneously stops the ciliary motion of the sea mussel. This is a general rule with all other marine animals; and it is singular that while pure water exercises this deleterious influence upon it, tolerably strong solutions of certain poisonous drugs, even solutions of prussic acid, opium, belladonna, and strychnia, are quite innocuous. Again, in the vertebrata, a little blood, if smeared over the ciliated membrane, will preserve the motion for some days; but if a little of this fluid is applied to the cilia of invertebrata, it instantly arrests their movement.

Ciliary motion, in cold-blooded animals, endures for an almost incredible period after their death. Thus in the tortoise, it remained for upwards of a fortnight after the death of the creature: it soon ceases, however, after death in the warm-blooded tribes.

On the whole, even in the cursory and imperfect glance we have taken, we may behold in ciliary motion a phenomenon of a very singular and interesting character; generally recognised, however, to exist only by the minority of the students of nature. Still it is a subject which is entitled to a more universal recognition, whether we regard the extensive series of creatures in whom it is found, or as it exhibits the exquisite handiwork of the Creator, or indeed as one of the many wonderful revelations of the microscope.

PHILOSOPHY OF TOYS.

Give a child a small box, and it will probably examine it all round, and in a very short time toss it away. The sight gratified a little, a change of image was desired, and this was the most obvious method of procuring a change. By this act the child brings up the consciousness of exertion; and the sight of a moving thing reproduces former images of motion and activity. Show it that the box opens, and it resumes the study of it—shuts it itself, opens it again; thus reverting from image to image, and delighting in the transformation, as the work of its own hands. It will not be long ere it resorts to the extreme step of throwing it away, and seeking it back to throw away again. From this and all other observations on childhood, we can see that a toy, which has nothing moveable or changeable about it, is a very imperfect thing: it has little source of thought in it. With a finely-finished toy—an effigy of a man, a dog, or a bird—a child will not lose much time ere it treats it as it would a stick, or a spoon, or an old canister; namely, beat the table with it to produce melody, and the ideas of life and motion, and self-exertion—toss it away, or apply it to his mouth to restore part of the pleasure of sucking the breast. It is a very common error to confound toys with ornaments in amusing children. We hear a nurse, on holding up a pretty bauble to an infant, saying, 'See, such a pretty,' as if the child's capacity of enjoyment as yet contained nothing but a love of dazzle. It is common, too, to present to the eye what is not given into the hand—a very thankless indulgence. The sense of beauty and of nice imitation are of late growth. What childhood needs is copiousness of images, resembling and fit for restoring those broad palpable ideas which it has been able to gain—to keep the faculty of identification and recovering of the past working all the day long. It is thus preparing itself for the highest operations of intellect in mature life. By indulging it in noises and rapid motions of all kinds, we are, besides breeding happiness, cultivating ideas of activity, bustle, and life, which are the foundation of the habits of the smart and active workman or man of business, the animated vehement orator, or the stake-all enthusiast.—*Westminster Review*.

STIMULANTS.

The flesh of animals and fermented liquors being much more stimulative than fruit and farinaceous vegetable substances, appear to impart considerably more strength and vigour to the muscular system than the latter; and doubtless while the stimulation lasts, a person is capable of much greater exertion under it; but the only sure way of permanently increasing the powers of the muscular system, is by a natural and nutritious diet, along with judicious exercise. The mode in which stimulants act, is by exciting the nervous energy, and quickening the circulation, and

thus producing rapid transformations of the tissues throughout the whole structure; and while these changes are taking place—whether as the effect of animal food, fermented liquors, anger, madness, fever, or exercise—the muscular power is (for the time) increased; but exhaustion constantly succeeds, and will invariably be in proportion to the degree and duration of their action. Exercise, however, is the only safe and legitimate stimulant in a normal state of the system; for it creates a healthy demand for renewal, by promoting the requisite decomposition of structure; while the others destroy the balance between decay and reproduction, and thus lay the foundation of local or general disease.—*Fruits and Farinacea*.

DRIVE YOUR BUSINESS, AND LET NOT IT DRIVE YOU.

Energy and force of character are among the first requisites essential to success in business. A man may possess a high degree of refinement, large stores of knowledge, and even a well-disciplined mind, but if he is destitute of this one principle, which may be termed resolution of soul, he is like a watch without a mainspring—beautiful, but inefficient, and unfit for service. Man was never made to act the part of an automaton, or mere machine. His powers are not designed to move quite so mechanically. He is to act, as well as to be acted upon. He must give life and stimulus to his calling. Is he not endued with a life-giving power, whose emanation is referred to that original source whence alone can be derived all inspiration? Man's efficiency must give character to his business. That employment, upon which is stamped the impress of a living and energetic soul, will do honour to any man, in any place, or at any age. It is poor policy, indeed, to loiter till driven by force. We thereby lose all the pleasures of satisfaction. Voluntary service, urged forward by a determined purpose, will give hopeful assurance if not a full warrant of success, and all the happiness of a just conquest. Behold the sluggish man! His occupation is a worthy one, but it finds him unworthy of the trust. It presses upon him with all the demand of imperative necessity. It finds him but a drone. He is confused by a multiplicity of cares. He is pressed down by a crowd of responsibilities, but makes no generous effort to discharge one of them. Thus his occupation suffers, his family are in want, and that good name, which is better than great riches, is lost. True, man is said to be a creature of circumstances, and he ought to be, in a sense, subject to the superintendence of a leading Providence; but this does not justify inertness of character. Man, by his own decision of character and determined spirit, can do much to remove and surmount the inconveniences and barriers incident to human life. Then be resolute, and both you and your business will 'go on and prosper.'—*Newspaper paragraph*.

LADIES' SHOES.

If shoes were constructed of the shape of the human foot, neither too large nor too small, and making an equal pressure everywhere, corns and bunions of the feet would never exist. But, unfortunately, shoes are seldom made after this fashion; and in ladies' shoes especially, there are generally two signal defects—first, the extremity of the shoe is much too narrow for that part of the foot (namely, the toes) which it is to contain; and, secondly, for displaying as much of the foot as possible, the whole of the tarsus and metatarsus is left uncovered, and the pressure of the shoe in front is thrown entirely upon the toes. The toes are thus first squeezed against each other, and then pushed out of their natural position; and all the projecting points, chiefly where the joints are situated, are pinched and tormented, either by the neighbouring toes, or by the leather of the shoe; and thus it is that corns of the feet are generated.—*Sir Benjamin Brodie*.

We regret to learn that we have been led into a mistake regarding the original source of the maxims on 'Moral Courage' which appeared in No. 122. They first appeared in a London weekly newspaper—the *English Gentleman*.

Published by W. and R. CHAMBERS, High Street, Edinburgh (also 98, Miller Street, Glasgow); and, with their permission by W. S. ORR, Amen Corner, London.—Printed by BRADBURY and EVANS, Whitefriars, London.

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